

REMARKS

Claims 1-15 are pending in this application.

The Office action rejects claims 1-15 under 35 U.S.C. 112, second paragraph, for use of the term "weakness". Claims 1 and 2 are amended herein to remove the term weakness. The applicant respectfully requests the Examiner's reconsideration of the rejection of claims 1-15 under 35 U.S.C. 112, second paragraph, in view of this amendment.

The Office action rejects claims 1-3, 6, 8-11, and 13 under 35 U.S.C. 102(e) over Nishizawa et al. (USP 6,323,832, hereinafter Nishizawa). The applicant respectfully traverses this rejection.

Independent claims 1 and 2 recite a matrix array device comprising semiconductor devices and corresponding pixel electrodes, wherein the substrate is configured to facilitate flexing in the areas of the pixel electrodes more readily than in the areas of the semiconductor devices. In the example figures, the pixel electrodes 18 are the plates that control the orientation of the liquid-crystal molecules to control the degree of transparency or opaqueness of the pixels. In an image sensing device, the pixel electrode are the image-sensing areas. As illustrated in FIG. 3, and as detailed on page 10, lines 11-21, the trenches 50 that facilitate flexing of the substrate are located beneath the pixel electrodes 180.

Nishizawa teaches a matrix array device with discrete display elements. Nishizawa is silent with regard to the internal details of the display elements, and does not distinguish between the semiconductor devices and pixel electrodes within each display element. In Nishizawa, the entire display element is in the non-flexing regions of the substrate, the regions over the trenches containing only the interconnect wires between each discrete display element.

Because Nishizawa teaches placing the entire display element in the non-flexing regions of the substrate, and does not teach placing the pixel electrode in the flexing regions of the substrate, as claimed by the applicant, the applicant respectfully requests the Examiner's reconsideration of the rejection of claims 1-3, 6, 8-11, and 13 under 35 U.S.C. 102(e) over Nishizawa.

The Office action rejects claims 4 and 5 under 35 U.S.C. 103(a) as being unpatentable over Nishizawa, and claims 7 and 12 under 35 U.S.C. 103(a) as being unpatentable over Nishizawa in view of Shanks et al. (USP 5,821,688, hereinafter Shanks). The applicant respectfully traverses these rejections, based on the remarks above regarding Nishizawa, and based on the following remarks.

Shanks teaches light-emitting diodes mounted on a flexible substrate, but does not teach or suggest providing areas of the substrate that facilitate more flexing than other areas. Shanks discloses that a light-emitting display element, such as the display element of Nishizawa, comprises two components: an electronic driver and an electrode with a light-emitting polymer.

One of ordinary skill in the art would not be lead to the applicant's invention from the teachings of Nishizawa and Shanks, because applying the teachings of Nishizawa to Shanks would place the flexing-trenches between the light-emitting display elements of Shanks, and not at the electrodes, as specifically claimed by the applicant.

In view of the foregoing, the applicant respectfully requests that the Examiner withdraw the rejections of record, allow all the pending claims, and find the present application to be in condition for allowance. If any points remain in issue that may best be resolved through a personal or telephonic interview, the Examiner is respectfully requested to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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On 26 March 2003

By *R. McDermott*

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